## DROSOPHILA CLIPPED FRT (CFRT) CHROMOSOME INSENSITIVE TO P TRANSPOSASE, GENERATING METHOD THEREOF, AND APPLICATION THEREOF

## ABSTRACT OF THE DISCLOSURE

A method for generating a Drosophila clipped FRT (cFRT) chromosome is provided, wherein the chromosome is insensitive to a P transposase but remains functional to a yeast site-specific flippase recombinase (FLP). The method includes steps of: (a) exposing a FRT chromosome to the P transposase for occurring a local and imprecise transposition, wherein the FRT chromosome contains a P[FRT] insertion with a selection marker gene, (b) screening the P[FRT] insertion insensitive to the P transposase to obtain screened products, (c) selecting candidate products from the screened products by further examinations, and (d) exposing the candidate products by the P transposase and selecting a desired product by the further examinations to obtain the Drosophila clipped FRT (cFRT) chromosome insensitive to the P transposase but remaining functional to the yeast site-specific flippase recombinase. The cFRT  $^{2L2R}$  chromosome can be used as the direct target in the direct P-transposon-induced mutagenesis.